

ABSTRACT

[066] A medical injection system includes a needle guard and an automatic injection system. The needle guard has a cartridge housing coupled with a release mechanism and configured to house a medical cartridge having a needle, a plunger and a carrier configured to carry the dose. Coupled with the cartridge housing and the release mechanism is a shield that is extendable between a retracted and an extended position that substantially covers the needle. The release mechanism is engageable and configured to maintain the shield in the retracted position and allow the shield to extend upon engagement. The automatic injection system can be configured to house the needle guard and configured to inject the dose when activated. The automatic injection system has a drive system configured to depress the plunger and engage the release mechanism when the automatic injection system is activated, and an activation system configured to activate the automatic injection system.